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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/828,811	04/21/2004	Mairead Lyons	21513/5	7263

7590 10/20/2006

Brian L. Michaelis
Brown Rudnick Berlack Israels LLP
One Financial Center
Boston, MA 02111

EXAMINER

LOVEL, KIMBERLY M

ART UNIT	PAPER NUMBER
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2167

DATE MAILED: 10/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/828,811	Applicant(s) LYONS ET AL.	
	Examiner Kimberly Lovel	Art Unit 2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-17 are rejected.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Items 20, 36, 38, 40, 54, 148, 196 (mentioned in the Specification as Step 19). Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-9 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 1 recites a system. However, the system as recited can be entirely embodied in software *per se*. Software is considered to represent non-statutory subject matter.

According to MPEP 2106:

The claims lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101. They are clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at best, functional descriptive material *per se*.

Descriptive material can be characterized as either “functional descriptive material” or “nonfunctional descriptive material.” Both types of “descriptive material” are nonstatutory when claimed as descriptive material *per se*, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994)

Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because “[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer.”).

Claims 2-9, which are dependent on claim 1 fail to overcome the rejection and therefore are rejected on the same grounds as claim 1.

To expedite a complete examination of the instant application, the claims rejected under 35 U.S.C. 101 (nonstatutory) above are further rejected as set forth below in anticipation of applicant amending these claims to place them within the four statutory categories of invention.

Claim Rejections - 35 USC § 103

4. Claims 1-7 and 10-13 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over US PGPub 2004/0186821 to Matson et al (hereafter Matson) in view of US Patent No 6,105,030 to Syed et al (hereafter Syed).

Referring to claim 1, Matson discloses a system for processing incoming data and inserting said incoming data into a database, comprising:

an incoming data receiving component [IM 107], to connect to a source of data [sources 101, 103 and 105] and receive incoming data (see [0031]);

a parsing component [process 211] communicating with said incoming data receiving component, to receive and parse said incoming data as a function of a plurality of fields [supplier name, supplier product number, etc] (see [0037]);

a loader component, in communication with said parsing component, to receive parsed data from said parsing component, and to sort said parsed data [stores in XML file 215 which can be split into a plurality of files] (see [0039], lines 1-3) as a function of said plurality of fields [XML file 215 is spilt into a plurality of files] (see [0041]);

a data sorting component [data load technician], in communication with said plurality of temporary tables and with said database, to access sorted data in said

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plurality of temporary tables, and to re-sort said sorted data into a plurality of tables [files] in said database [database 111] (see [0059]-[0060]).

However, Matson fail to explicitly disclose the further limitation of sorting the parsed data into a plurality of temporary tables. Syed discloses temporary tables, including the further limitation of sorting the parsed data into a plurality of temporary tables (see column 5, lines 21-27) in order to increases efficiency by avoiding feeding data into a data import process without having a thorough understanding of data beforehand.

It would have been obvious to one of ordinary skill in the art at the time of the invention to use the feature of temporary tables as disclosed by Syed as a substitute for the files used by Matson. One would have been motivated to do so in order to increases efficiency by avoiding feeding data into a data import process without having a thorough understanding of data beforehand (Matson: see [0035], lines 10-12)

Referring to claim 2, the combination of Matson and Syed (hereafter Matson/Syed) discloses the system of claim 1 wherein said loader component performs the following steps:

processing said parsed data into a proper format [XML] for insertion into said database [database 111] (Matson: see [0036]-[0037], lines 1-3);

storing said parsed data in a file [supplier XML file 215] (see [0039], lines 3-8);

deactivating access [lock table] to a temporary table in said database (Syed: see column 5, lines 19-20);

loading said file into said temporary table in said database (Syed: see column 5, lines 21-27); and

re-activating access [releasing lock] to said temporary table (Syed: see column 5, lines 28-29).

Referring to claim 3, Matson/Syed discloses the system of claim 1 wherein said data sorting component also inserts relational link information in said plurality of tables in said database [loading relational data into database 111] (Matson: see [0035], lines 7-10).

Referring to claim 4, Matson/Syed discloses the system of claim 1 wherein said data sorting component, upon accessing a data item in said temporary tables that indicates an error, moves said data item into a corresponding error table [faulty products data file] (see Matson [0043]).

Referring to claim 5, Matson/Syed discloses the system of claim 1 wherein:
said parsing component includes a generic parsing component having common functionality to parse data (Matson: see [0037]); and

wherein at least one specific function is implemented into a specific parsing component which encapsulates said generic parsing component, said at least one specific function modifying functionality of said generic parsing component so that said specific parsing component can parse data in a specific format (Matson: see [0038]).

Referring to claim 6, Matson/Syed discloses the system of claim 5 wherein said at least one specific function overrides corresponding functionality in said generic parsing component (Matson: see [0038]).

Referring to claim 7, Matson/Syed discloses the system of claim 1 wherein said data sorting component processes data in terms of one of: transaction data [product transactions] (Matson: see [0023]), line item data, additional data, enhanced data, trip leg data, and card balance data.

Referring to claim 10, Matson discloses a method for loading data into a database, comprising:

receiving data from a source of data [sources 101, 103 and 105] (see [0031]);
parsing said data as a function of a plurality of fields [supplier name, supplier product number, etc] to form parsed data (see [0037]);

sorting said parsed data [stores in XML file 215 which can be split into a plurality of files] (see [0039], lines 1-3) as a function of said plurality of fields [XML file 215 is split into a plurality of files] to form sorted data (see [0041]);

re-sorting and inserting said sorted data into a tables [files] in said database [database 111] (see [0059]-[0060]).

However, Matson fail to explicitly disclose the further limitation of sorting the parsed data into a plurality of temporary tables. Syed discloses temporary tables, including the further limitation of sorting the parsed data into a plurality of temporary tables (see column5, lines 21-27) in order to increases efficiency by avoiding feeding data into a data import process without having a thorough understanding of data beforehand.

It would have been obvious to one of ordinary skill in the art at the time of the invention to use the feature of temporary tables as disclosed by Syed as a substitute for

the files used by Matson. One would have been motivated to do so in order to increase efficiency by avoiding feeding data into a data import process without having a thorough understanding of data beforehand (Matson: see [0035], lines 10-12)

Referring to claim 11, Matson/Syed discloses the method of claim 10 wherein said step of sorting said parsed data into a plurality of temporary tables includes the following steps:

processing said parsed data into a proper format [XML] for insertion into said database [database 111] (Matson: see [0036]-[0037], lines 1-3);

storing said parsed data in a file [supplier XML file 215] (see [0039], lines 3-8);

deactivating access [lock table] to a temporary table in said database (Syed: see column 5, lines 19-20);

loading said file into said temporary table in said database (Syed: see column 5, lines 21-27); and

re-activating access [releasing lock] to said temporary table (Syed: see column 5, lines 28-29).

Referring to claim 12, Matson/Syed discloses the method of claim 10 further including: during said step of inserting said sorted data into tables in said database, inserting relational link information to other tables in said database [loading relational data into database 111] (Matson: see [0035], lines 7-10).

Referring to claim 13, Matson/Syed discloses the method of claim 10 wherein said step of re-sorting and inserting said sorted data into tables in said database

includes: if a data item indicates an error, moving said data item into a corresponding error table in said database [faulty products data file] (see Matson: [0043]).

Referring to claim 15, Matson/Syed discloses the method of claim 10 wherein said step of parsing said data includes:

providing a generic parsing process, said generic parsing process including common functionality to parse data (Matson: see [0037]);

providing a set of specific functions to be implemented in a specific parsing process which encapsulates said generic parsing process, said set of specific functions modifying said generic parsing process so said generic parsing process includes functionality to parse data according to said set of specific functions (Matson: see [0038]).

Referring to claim 16, Matson/Syed discloses the method of claim 15 wherein said set of specific functions override corresponding functions in said generic parsing process (Matson: see [0038]).

Referring to claim 17, Matson/Syed discloses the method of claim 10 wherein said step of re-sorting and inserting said sorted data into tables in said database includes processing said sorted data in terms of one of: transaction data [product transactions] (Matson: see [0023]), line item data, additional data, enhanced data, trip leg data, and card balance data.

5. Claims 8, 9 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over US PGPub 2004/0186821 to Matson et al in view of US Patent

No 6,105,030 to Syed et al as applied respectively to claims 1 and 10 above, and further in view of US Patent No 6,633,878 to Underwood (hereafter Underwood).

Referring to claim 8, Matson/Syed discloses transactions, however, Matson/Syed fails to explicitly disclose the further limitation wherein said data is transactional data representing transactions completed using a commercial credit card. Underwood discloses initializing an ecommerce database framework, including the further limitation wherein said data is transactional data representing transactions completed using a commercial credit card (see column 107, lines 56-61).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the feature of Underwood wherein commercial credit cards represent the transactions with the system of Matson/Syed. One would have been motivated to do so since Matson/Syed handles data received from real-time data feeds (Matson: see [0023], lines 3-7).

Referring to claim 9, the combination of Matson/Syed and Underwood discloses the system of claim 8 wherein said data sorting component includes additional information in said data tables regarding tax information for said transactional data (Underwood: see column 116, lines 7-17).

Referring to claim 14, Matson/Syed discloses transactions, however, Matson/Syed fails to explicitly disclose the further limitation wherein said data is credit card transaction data. Underwood discloses initializing an ecommerce database framework, including the further limitation said data is credit card transaction data (see column 107, lines 56-61).

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the feature of Underwood wherein commercial credit cards represent the transactions with the method of Matson/Syed. One would have been motivated to do so since Matson/Syed handles data received from real-time data feeds (Matson: see [0023], lines 3-7).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- US PGPub 2003/0050825 to Gallivan et al
- US PGPub 2004/0153382 to Bocuzzi et al
- US PGPub 2005/0209876 to Kennis et al

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly Lovel whose telephone number is (571) 272-2750. The examiner can normally be reached on 8:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cottingham can be reached on (571) 272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kimberly Lovel
Examiner
Art Unit 2167

15 October 2006
kml

16 October 2006
kml


JOHN COTTINGHAM
PATENT EXAMINER


16 October 2006